

US EPA ARCHIVE DOCUMENT

Progress Review of STAR Grant Research on Carbon Geosequestration *EPA Regional Perspective*

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Region V UIC Overview

- Region V includes: MN, WI, MI, IL, IN and OH
- Direct Implementation and Primacy state programs
- 35 federally recognized Native American tribes
- Issue permits for:
 - Class I (hazardous and non-haz)
 - Class II, III, and some deep Class V (mostly experimental and spent brine reinjection)
 - Aquifer Storage and recovery
- Identified approximately 10,000 shallow Class V wells
- Land Ban Exemptions (related to hazardous injection)
- Granted some aquifer exemptions

Region V States Seeking Class VI Primacy

- Michigan – No
- Ohio – No
- Illinois – No
- Indiana – No
- Wisconsin – No
- Minnesota – No

Class VI Permit Applications

- Region V is currently working on four Class VI permit applications with two more expected “soon”
 - Archers Daniels Midland
 - Tenaska Energy (Taylorville Energy Center)
 - FutureGen 2.0 (expect two, may get four applications)
- In Michigan, Battelle is planning a large scale injection project as part of an existing EOR operation

Class VI Permit Appl. Review

- Region V just received ADM's response to the second Notice of deficiency
- Region V is waiting for Tenaska's response to the first Notice of deficiency
- Region V is sending out e-mails to both applicants with instructions on how to upload computational modeling data into the Input Advisor
- The Input Advisor will allow the Agency to run STOMP-CO₂ models for sensitivity analysis

Issues that have come up during the application review process:

- How much expertise will the Regions need if CCS does not gain momentum?
- How will we evaluate mechanical integrity demonstrations in a CO₂ environment when these tests were not designed to be run in one?
- Should we be looking at potential surface impacts and environmental justice concerns based upon the potentially huge AoRs or just near the well?
- Conservative vs. Realistic / Operational modeling



The End